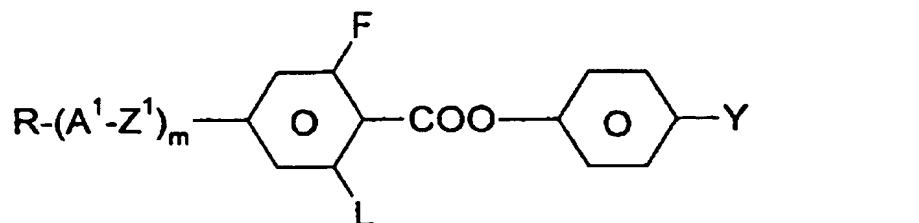


The following listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended): A liquid-crystalline medium comprising:  
at least one phenol ester of formula I



in which

R is H, an alkyl or alkenyl radical having up to 15 carbon atoms which is unsubstituted, monosubstituted by CN or CF<sub>3</sub> or at least monosubstituted by halogen, where, in addition, one or more CH<sub>2</sub> groups are optionally replaced by -O-, -S-, -CH=CH-, -C≡C-, -OC-O- or -O-CO- in such a way that O atoms are not linked directly to one another,

A<sup>1</sup>

- a) is a 1,4-cyclohexenylenes or 1,4-cyclohexylene radical, in which in each case one or two non-adjacent CH<sub>2</sub> groups are each optionally replaced by -O- or -S-,
- b) is a 1,4-phenylene radical, in which one or two CH are each optionally replaced by N,
- c) is a piperidine-1,4-diyl, 1,4-bicyclo[2.2.2]octylene, naphthalene-2,6-diyl, decahydronaphthalene-2,6-diyl or 1,2,3,4-tetrahydronaphthalene-2,6-diyl radical,

where the radicals a), b) and c) are in each case unsubstituted or monosubstituted or polysubstituted by halogen atoms,

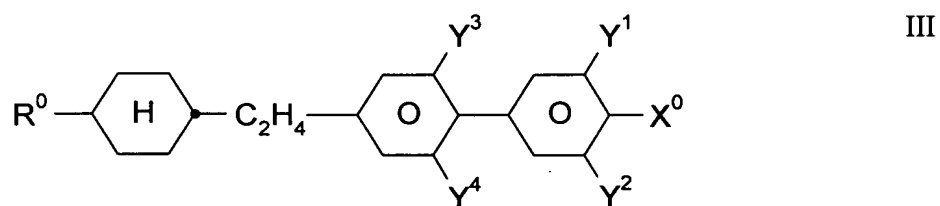
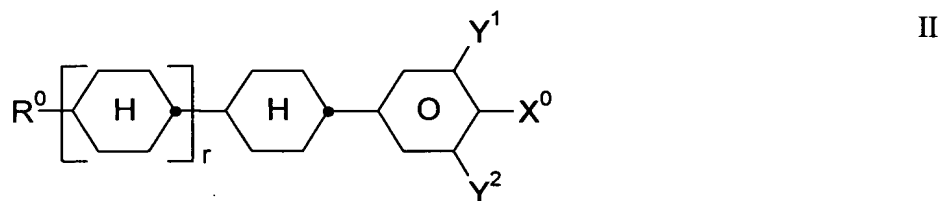
$Z^1$  is  $-\text{CO}-\text{O}-$ ,  $-\text{O}-\text{CO}-$ ,  $-\text{CF}_2\text{O}-$ ,  $-\text{OCF}_2-$ ,  $-\text{CH}_2\text{O}-$ ,  $-\text{OCH}_2-$ ,  $-\text{CH}_2\text{CH}_2-$ ,  $-\text{C}_2\text{F}_4-$ ,  $-\text{C}_2\text{F}_2-$ ,  $-\text{CH}=\text{CH}-$ ,  $-\text{C}\equiv\text{C}-$  or a single bond,

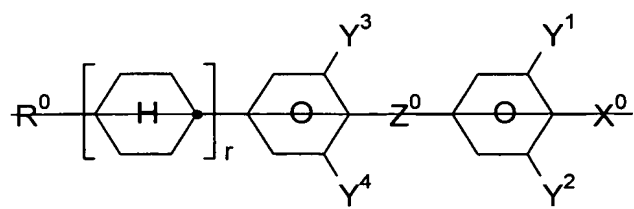
$Y$  is  $\text{F}$ ,  $\text{Cl}$ ,  $\text{CN}$ , or a monohalogenated or polyhalogenated alkyl, alkenyl, alkenyloxy or alkoxy radical having 1 to 5 carbon atoms,

$L$  is  $\text{H}$  or  $\text{F}$ , and

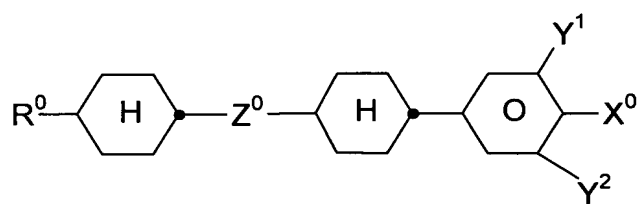
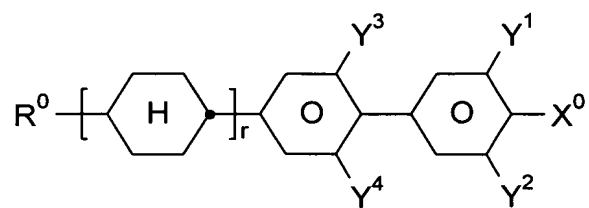
$m$  is 0, 1 or 2; and

one or more compounds selected from formulae II, III, IV, V, VI, VII, VIII and IX:

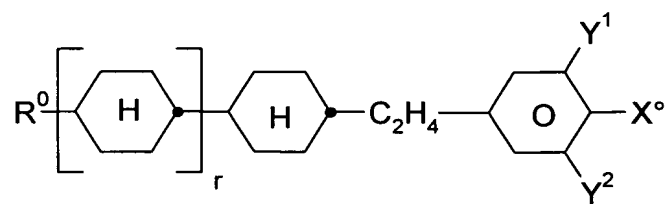




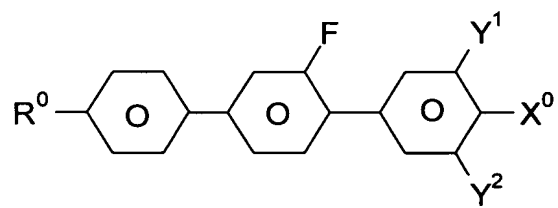
IV



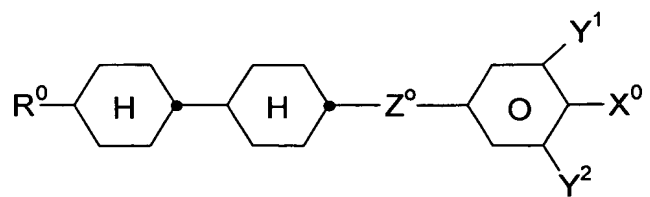
V



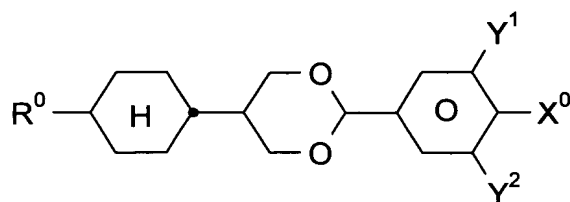
VI



VII



VIII



wherein

$R^0$  is n-alkyl, oxaalkyl, fluoroalkyl, alkenyloxy or alkenyl, each having up to 9 carbon atoms,

$X^0$  is F, Cl, or halogenated alkyl, halogenated alkenyl, halogenated or halogenated alkoxy, in each case having up to 6 carbon atoms,

$Z^0$  is  $-C_2H_4-$ ,  $-C_2F_4-$ ,  $-CF_2O-$ ,  $-OCF_2-$  or  $-COO-$ ,

$Y^1, Y^2,$

$Y^3$  and  $Y^4$  are each, independently of one another, H or F, and

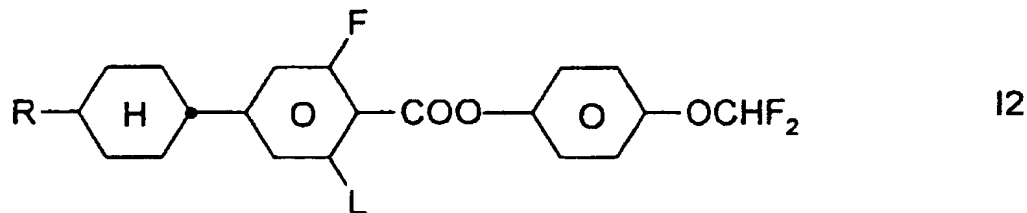
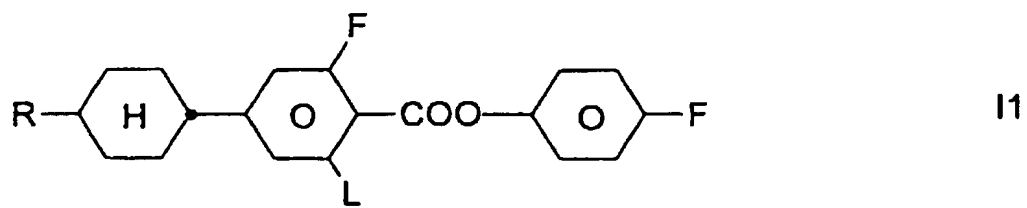
$r$  is 0 or 1.

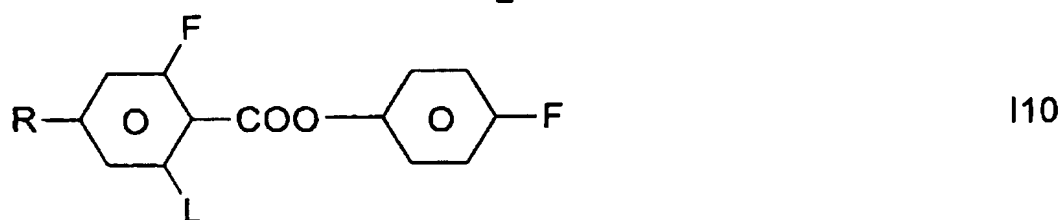
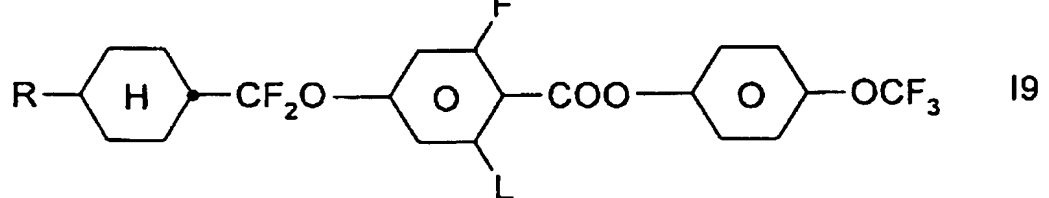
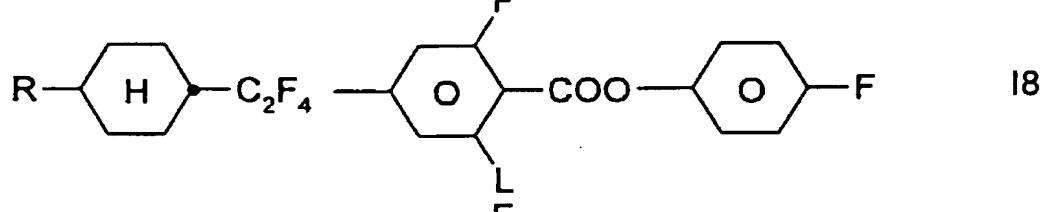
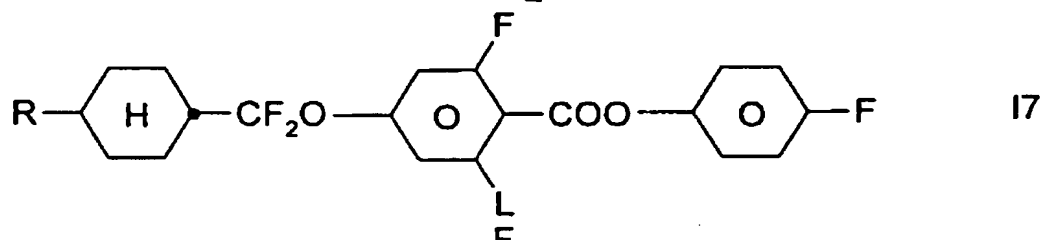
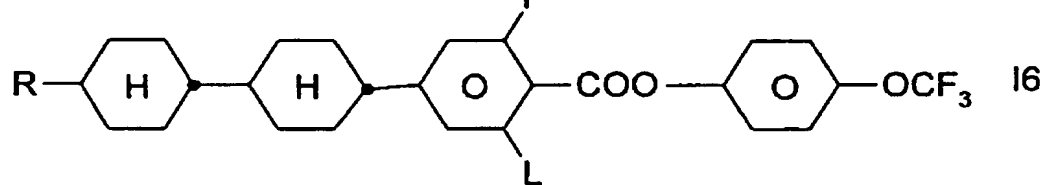
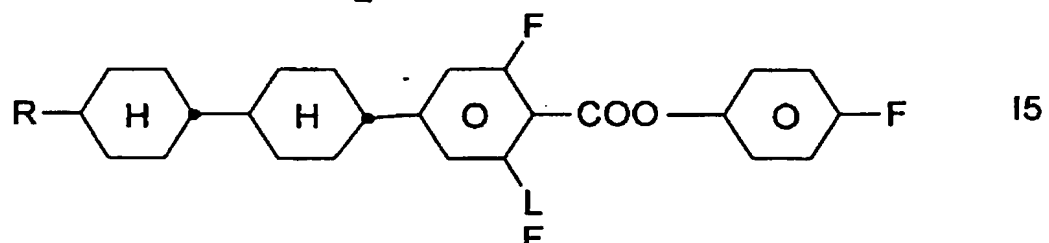
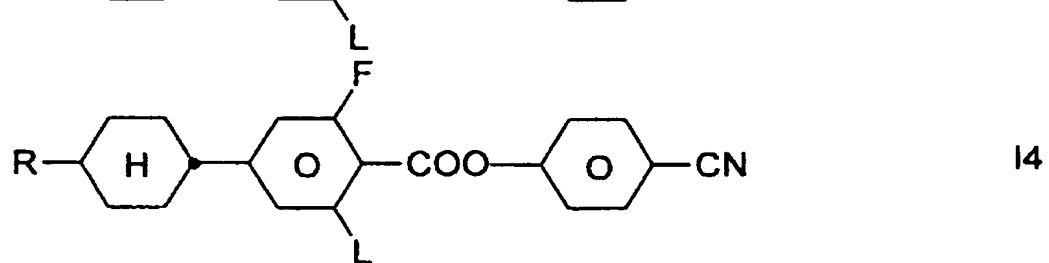
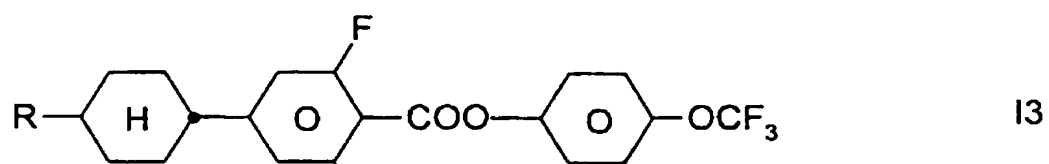
2. (Previously Presented): A liquid-crystalline medium according to Claim 1, wherein R is a straight-chain alkyl radical having from 1 to 10 carbon atoms or an alkenyl radical having from 2 to 10 carbon atoms.

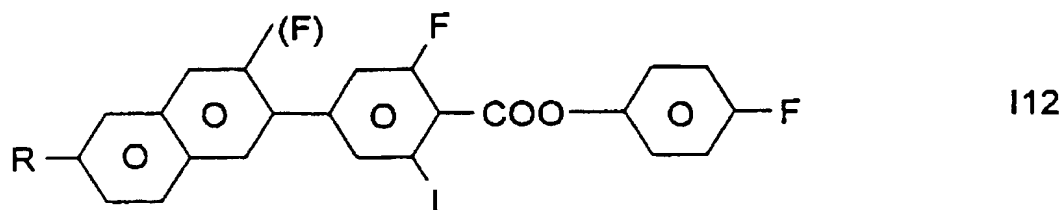
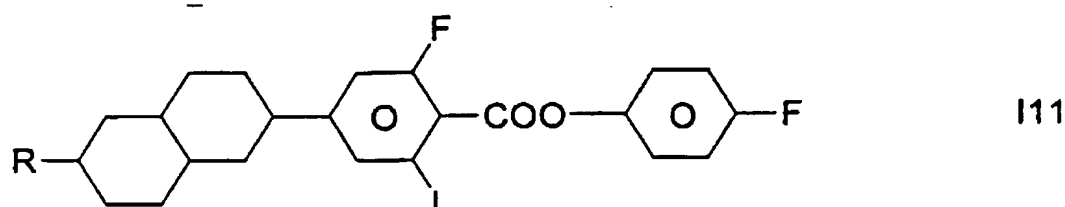
3. (Previously Presented): A liquid-crystalline medium according to Claim 1, wherein Y is F, Cl, CN,  $CF_3$ ,  $CF_2H$ ,  $OCF_3$ ,  $OCF_2H$ ,  $OCFHCF_3$ ,  $OCFHCFH_2$ ,  $OCFHCF_2H$ ,  $OCF_2CH_3$ ,  $OCF_2CFH_2$ ,  $OCF_2CF_2H$ ,  $OCF_2CF_2CF_2H$ ,  $OCF_2CF_2CFH_2$ ,  $OCFHCF_2CF_3$ ,  $OCFHCF_2CF_2H$ ,  $OCF_2CF_2CF_3$ ,  $OCF_2CHF_2CF_3$  or  $OCClFCF_2CF_3$ .

4. (Previously Presented): A liquid-crystalline medium according to Claim 1, wherein m is 1.

5. (Previously Presented): A liquid-crystalline medium according to claim 1, wherein said compound of formula I is selected from subformulae I1 to I12:







wherein

R is H, an alkyl or alkenyl radical having up to 15 carbon atoms which is unsubstituted, monosubstituted by CN or CF<sub>3</sub> or at least monosubstituted by halogen, where, in addition, one or more CH<sub>2</sub> groups are optionally replaced by -O-, -S-, -CH=CH-, -C≡C-, -OC-O- or -O-CO- in such a way that O atoms are not linked directly to one another,

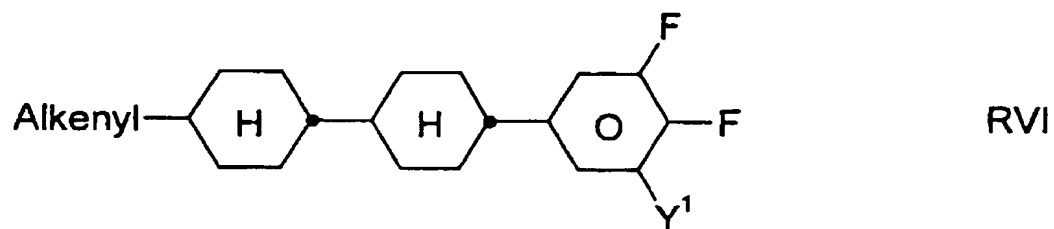
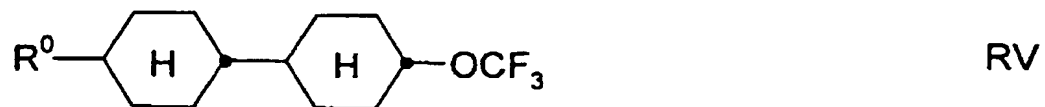
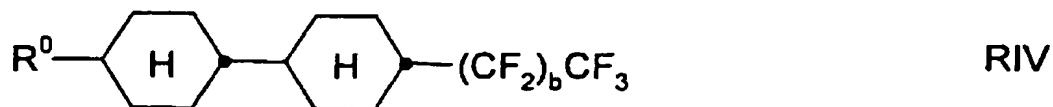
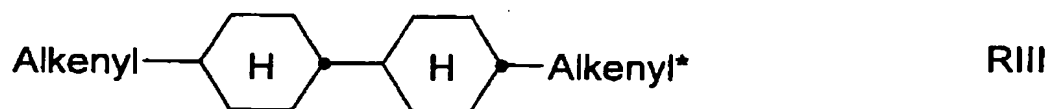
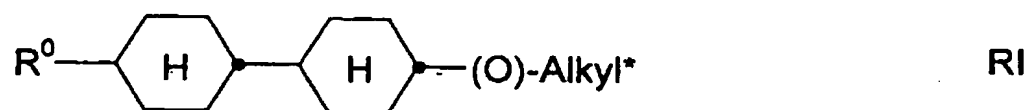
L is H or F.

6. (Cancelled):

7. (Cancelled):

8. (Previously Presented): A medium according to Claim 1, wherein the proportion of compounds of the formulae I to IX in the medium is at least 50% by weight.

9. (Previously Presented): A medium according to Claim 1, wherein said medium additionally comprises one or more compounds of formulae RI to RVI



wherein

$R^0$  is n-alkyl, oxoalkyl, fluoroalkyl, alkenyloxy or alkenyl, in each case having up to 9 carbon atoms,

$b$  is 0, 1 or 2,

$Y^1$  is H or F,

$\text{Alkyl}^*$  is a straight-chain alkyl radical having up to 9 carbon atoms,  
and



Alkenyl or Alkenyl\* is, in each case independently of one another, an alkenyl radical having up to 9 carbon atoms.

10. (Previously Presented): A medium according to Claim 1, wherein  $X^0$  is F or  $OCF_3$  and  $Y^2$  is H or F.
11. (Previously Presented): In a method of generating an electro-optical effect using a liquid-crystalline medium, the improvement wherein said liquid-crystalline medium is according to Claim 1.
12. (Previously Presented): An electro-optical liquid-crystal display containing a liquid-crystalline medium, wherein said medium is according to Claim 1.
13. (Previously Presented): A medium according to claim 1, wherein L is F.
14. (Currently Amended): A medium according to claim 1, wherein m is preferably 1.
15. (Previously Presented): A medium according to claim 1, wherein  $Z^1$  is a single bond,  $-CF_2O-$ ,  $-OCF_2-$ ,  $-C_2F_4-$ ,  $-CH_2O-$ ,  $-OCH_2-$  or  $-COO-$ .
16. (Previously Presented): A medium according to claim 1, wherein R is a straight-chain alkyl or straight-chain alkenyl radical which is monosubstituted by CN or  $CF_3$ .
17. (Previously Presented): A medium according to claim 1, wherein R is a straight-chain alkyl or straight-chain alkenyl radical which is at least monosubstituted by F or Cl.
18. (Previously Presented): A medium according to claim 1, wherein Y is F, CN,  $OCF_3$ ,  $OCHF_2$ ,  $CF_3$ ,  $OCHF_2CF_3$ ,  $OC_2F_5$  or  $OCF_2CH_2CF_3$ .
19. (Previously Presented): A medium according to claim 1, wherein R is straight-

chain alkyl, alkoxy, alkenyloxy or alkenyl having up to 10 carbon atoms.

20. (Previously Presented): A medium according to Claim 1, wherein A<sup>2</sup> is Phe, PheF, PheFF, Cyc, Che, Pyr, Dio, Dec or Nap,

Cyc is 1,4-cyclohexylene, Che is 1,4-cyclohexenylene, Dio is 1,3-dioxane-2,5-diyl, Phe is 1,4-phenylene radical, Pyr is pyrimidine-2,5-diyl, PheF is 2- or 3-fluoro-1,4-phenylene, PheFF is 2,3-difluoro- or 2,6-difluoro-1,4-phenylene, Nap is substituted or unsubstituted naphthalene, and Dec is decahydronaphthalene.

21. (Previously Presented): A medium according to Claim 1, wherein said compound contains not more than one of the radicals Bi, Pyd, Pyr, Dio, Dit, Nap or Dec,

Dio is 1,3-dioxane-2,5-diyl, Dit is 1,3-dithiane-2,5-diyl, Pyd is pyridine-2,5-diyl, Pyr is pyrimidine-2,5-diyl, Bi is bicyclo[2.2.2]octylene, Nap is substituted or unsubstituted naphthalene, and Dec is decahydronaphthalene.

22. (Previously Presented): A medium according to Claim 1, wherein A<sup>1</sup> is particular, 2-fluoro-1,4-phenylene, 3-fluoro-1,4-phenylene, 2,3-difluoro-1,4-phenylene or 2,6-difluoro-1,4-phenylene.

23. (Previously Presented): A medium according to Claim 1, wherein said medium has a nematic phase down to -20°C, a clearing point above 80°C, and a dielectric anisotropy value  $\Delta\epsilon$  of  $\geq 4$ .

24. (Previously Presented): A medium according to Claim 23, wherein said medium has a nematic phase down to -30°C, and a clearing point above 90°C.

25. (Previously Presented): A medium according to Claim 23, wherein said medium has a nematic phase down to -40°C, and a clearing point above 100°C.

26. (Previously Presented): A medium according to Claim 23, wherein said medium has a dielectric anisotropy values  $\Delta\epsilon$  of  $\geq 6$ .

27. (Previously Presented): A medium according to Claim 1, wherein said medium has a TN threshold below 1.5 V.

28. (Previously Presented): A medium according to Claim 27, wherein said medium has a TN threshold below 1.3 V.

29. (Previously Presented): A medium according to Claim 27, wherein said medium has a TN threshold  $< 1.0$  V.

30. (Previously Presented): A medium according to Claim 1, wherein the proportion of compounds of formula I in the medium is 5 to 50% by weight.

31. (Previously Presented): A medium according to Claim 1, wherein the proportion of compounds of the formulae II to IX in the medium is 30 to 70% by weight.

32. (Previously Presented): A medium according to Claim 1, wherein the flow viscosity  $\nu_{20}$  at 20°C of the medium is  $< 60 \text{ mm}^2 \cdot \text{s}^{-1}$ .

33. (Previously Presented): A medium according to Claim 1, wherein the flow viscosity  $\nu_{20}$  at 20°C of the medium is  $< 50 \text{ mm}^2 \cdot \text{s}^{-1}$ .

34. (Previously Presented): A medium according to Claim 1, wherein the nematic phase range of the medium is at least 90°.

35. (Previously Presented): A medium according to Claim 1; wherein the nematic phase range of the medium is at least 100°.

36. (Previously Presented): A medium according to Claim 1, wherein the nematic phase range of the medium is extends at least from -30° to +80°.

37. (Previously Presented): A medium according to Claim 1, wherein said medium contains two or more of compounds of the formula I, and the proportion of compounds of

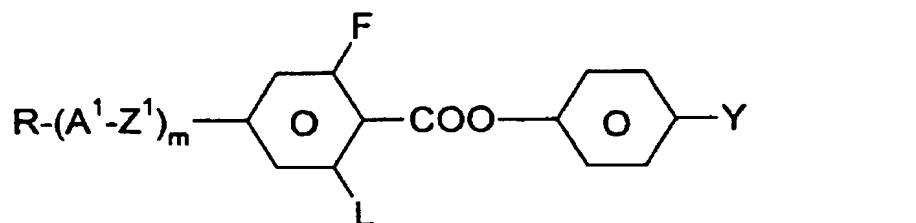
formula I in the medium is 5-95%.

38. (Previously Presented): A medium according to Claim 1, wherein said medium contains two or more of compounds of the formula I, and the proportion of compounds of formula I in the medium is 10-60%.

39. (Previously Presented): A medium according to Claim 1, wherein said medium contains two or more of compounds of the formula I, and the proportion of compounds of formula I in the medium is 20-50%.

40. (Previously Presented): A medium according to Claim 1, wherein said medium has an optical anisotropy of 0.0892-0.1050.

41. (Currently Amended): A liquid-crystalline phenol esters of formula I



in which

R is H, an alkyl or alkenyl radical having up to 15 carbon atoms which is unsubstituted, monosubstituted by CN or CF<sub>3</sub> or at least monosubstituted by halogen, where, in addition, one or more CH<sub>2</sub> groups are optionally replaced by -O-, -S-, -CH=CH-, -C≡C-, -OC-O- or -O-CO- in such a way that O atoms are not linked directly to one another,

A<sup>1</sup> a) is a 1,4-cyclohexenylene or 1,4-cyclohexylene radical, in which in each case one or two non-adjacent CH<sub>2</sub> groups are each optionally replaced by -O- or -S-,

- b) is a 1,4-phenylene radical, in which one or two CH are each optionally replaced by N,
- c) is a piperidine-1,4-diyl, 1,4-bicyclo[2.2.2]octylene, naphthalene-2,6-diyl, decahydronaphthalene-2,6-diyl or 1,2,3,4-tetrahydronaphthalene-2,6-diyl radical,

where the radicals a), b) and c) are in each case unsubstituted or monosubstituted or polysubstituted by halogen atoms,

Z<sup>1</sup> is -CO-O-, -O-CO-, -CF<sub>2</sub>O-, -OCF<sub>2</sub>-, -CH<sub>2</sub>O-, -OCH<sub>2</sub>-, -CH<sub>2</sub>CH<sub>2</sub>-, -C<sub>2</sub>F<sub>4</sub>-, -C<sub>2</sub>F<sub>2</sub>-, -CH=CH-, -C≡C- or a single bond,

Y is OCFHCFH<sub>2</sub>, OCFHCF<sub>2</sub>H, OCF<sub>2</sub>CH<sub>3</sub>, OCF<sub>2</sub>CFH<sub>2</sub>, OCF<sub>2</sub>CF<sub>2</sub>H, OCF<sub>2</sub>CF<sub>2</sub>CF<sub>2</sub>H, OCF<sub>2</sub>CF<sub>2</sub>CFH<sub>2</sub>, OCFHCF<sub>2</sub>CF<sub>3</sub>, OCFHCF<sub>2</sub>CF<sub>2</sub>H, OCFHCFHCF<sub>3</sub>, OCH<sub>2</sub>CF<sub>2</sub>CF<sub>3</sub>, OCF<sub>2</sub>CF<sub>2</sub>CF<sub>3</sub>, OCF<sub>2</sub>CFHCFH<sub>2</sub>, OCF<sub>2</sub>CH<sub>2</sub>CF<sub>2</sub>H, OCFHCF<sub>2</sub>CFH<sub>2</sub>, OCFHCFHCF<sub>2</sub>H, OCFHCH<sub>2</sub>CF<sub>3</sub>, OCH<sub>2</sub>CFHCF<sub>3</sub>, OCH<sub>2</sub>CF<sub>2</sub>CF<sub>2</sub>H, OCF<sub>2</sub>CFHCH<sub>3</sub>, OCF<sub>2</sub>CH<sub>2</sub>CFH<sub>2</sub>, OCFHCF<sub>2</sub>CH<sub>3</sub>, OCFHCFHCFH<sub>2</sub>, OCFHCH<sub>2</sub>CF<sub>3</sub>, OCH<sub>2</sub>CF<sub>2</sub>CFH<sub>2</sub>, OCH<sub>2</sub>CFHCF<sub>2</sub>H, OCF<sub>2</sub>CH<sub>2</sub>CH<sub>3</sub>, OCFHCFHCH<sub>3</sub>, OCFHCH<sub>2</sub>CFH<sub>2</sub>, OCH<sub>2</sub>CF<sub>2</sub>CH<sub>3</sub>, OCH<sub>2</sub>CFHCFH<sub>2</sub>, OCH<sub>2</sub>CH<sub>2</sub>CF<sub>2</sub>H, OCH<sub>2</sub>CH<sub>2</sub>CH<sub>3</sub>, OCH<sub>2</sub>CFHCH<sub>3</sub>, OCH<sub>2</sub>CH<sub>2</sub>CF<sub>2</sub>H, OCCIFCF<sub>3</sub>, OCCIFCCIF<sub>2</sub>, OCCIFCFH<sub>2</sub>, OCFHCCl<sub>2</sub>F, OCCIFCF<sub>2</sub>H, OCCIFCCIF<sub>2</sub>, OCF<sub>2</sub>CClH<sub>2</sub>, OCF<sub>2</sub>CCl<sub>2</sub>H, OCF<sub>2</sub>CCl<sub>2</sub>F, OCF<sub>2</sub>CCIFH, OCF<sub>2</sub>CCIF<sub>2</sub>, OCF<sub>2</sub>CF<sub>2</sub>CCIF<sub>2</sub>, OCF<sub>2</sub>CF<sub>2</sub>CCl<sub>2</sub>F, OCCIFCF<sub>2</sub>CF<sub>3</sub>, OCCIFCF<sub>2</sub>CF<sub>2</sub>H, OCCIFCF<sub>2</sub>CCIF<sub>2</sub>, OCCIFCFHCF<sub>3</sub>, OCCIFCCIFCF<sub>3</sub>, OCCl<sub>2</sub>CF<sub>2</sub>CF<sub>3</sub>, OCClHCF<sub>2</sub>CF<sub>3</sub>, OCCIFCF<sub>2</sub>CF<sub>3</sub>, OCF<sub>2</sub>CCIFCFH<sub>2</sub>, OCF<sub>2</sub>CF<sub>2</sub>CCl<sub>2</sub>F, OCF<sub>2</sub>CCl<sub>2</sub>CF<sub>2</sub>H, OCF<sub>2</sub>CH<sub>2</sub>CCIF<sub>2</sub>, OCCIFCF<sub>2</sub>CFH<sub>2</sub>, OCFHCF<sub>2</sub>CCl<sub>2</sub>F, OCCIFCFHCF<sub>2</sub>H, OCCIFCCIFCF<sub>2</sub>H, OCFHCFHCCIF<sub>2</sub>, OCCIFCH<sub>2</sub>CF<sub>3</sub>, OCFHCCl<sub>2</sub>CF<sub>3</sub>, OCCl<sub>2</sub>CFHCF<sub>3</sub>, OCH<sub>2</sub>CCIFCF<sub>3</sub>, OCCl<sub>2</sub>CF<sub>2</sub>CF<sub>2</sub>H, OCH<sub>2</sub>CF<sub>2</sub>CCIF<sub>2</sub>, OCF<sub>2</sub>CCIFCH<sub>3</sub>, OCF<sub>2</sub>CFHCCl<sub>2</sub>H, OCF<sub>2</sub>CCl<sub>2</sub>CFH<sub>2</sub>, OCF<sub>2</sub>CH<sub>2</sub>CCl<sub>2</sub>F, OCCIFCF<sub>2</sub>CH<sub>3</sub>, OCFHCF<sub>2</sub>CCl<sub>2</sub>H, OCCIFCCIFCFH<sub>2</sub>, OCFHCFHCCl<sub>2</sub>F, OCCIFCH<sub>2</sub>CF<sub>3</sub>, OCFHCCl<sub>2</sub>CF<sub>3</sub>, OCCl<sub>2</sub>CF<sub>2</sub>CFH<sub>2</sub>, OCH<sub>2</sub>CF<sub>2</sub>CCl<sub>2</sub>F, OCCl<sub>2</sub>CFHCF<sub>2</sub>H, OCClHCCIFCF<sub>2</sub>H, OCF<sub>2</sub>CClHCClH<sub>2</sub>, OCF<sub>2</sub>CH<sub>2</sub>CCl<sub>2</sub>H, OCCIFCFHCH<sub>3</sub>, OCF<sub>2</sub>CCIFCCl<sub>2</sub>H, OCCIFCH<sub>2</sub>CFH<sub>2</sub>, OCFHCCl<sub>2</sub>CFH<sub>2</sub>, OCCl<sub>2</sub>CF<sub>2</sub>CH<sub>3</sub>, OCH<sub>2</sub>CF<sub>2</sub>CClH<sub>2</sub>, OCCl<sub>2</sub>CFHCFH<sub>2</sub>, OCH<sub>2</sub>CCIFCFCl<sub>2</sub>, OCH<sub>2</sub>CH<sub>2</sub>CF<sub>2</sub>H, OCClHCClHCF<sub>2</sub>H, OCH<sub>2</sub>CCl<sub>2</sub>CF<sub>2</sub>H, OCCIFCH<sub>2</sub>CH<sub>3</sub>, OCFHCH<sub>2</sub>CCl<sub>2</sub>H, OCClHCFHCClH<sub>2</sub>, OCH<sub>2</sub>CFHCCl<sub>2</sub>H, OCCl<sub>2</sub>CH<sub>2</sub>CF<sub>2</sub>H, OCH<sub>2</sub>CCl<sub>2</sub>CF<sub>2</sub>H, CH=CF<sub>2</sub>, CF=CF<sub>2</sub>, OCH=CF<sub>2</sub>, OCF=CF<sub>2</sub>, CH=CHF, OCH=CHF, or CF=CHF,

L is H or F, and  
m is 0, 1 or 2.